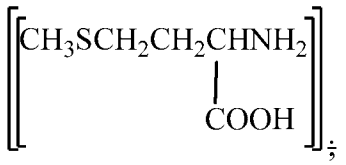
This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method for reducing oral mucositis in a human or animal patient in need thereof exposed to radiation, the method comprising administering to said patient an effective amount of a protective agent selected from the group consisting of D-methionine, L-methionine, a mixture of D-methionine and L-methionine, and ~~comprising methionine having the structure~~



~~or~~ a pharmaceutically acceptable salt thereof.

2. (cancelled)

3. (cancelled)

4. (currently amended) A method as set forth in claim 1 [[3]], wherein the protective agent is D-methionine.

5. (currently amended) A method as set forth in claim 1 [[3]], wherein the protective agent is L-methionine.

6. (currently amended) A method as set forth in claim 1 [[3]], wherein the protective agent is D,L-methionine.

7. (original) A method as set forth in claim 1, wherein the protective agent is administered prior to said radiation exposure.

8. (original) A method as set forth in claim 1, wherein the protective agent is administered simultaneously with said radiation exposure.

9. (original) A method as set forth in claim 1, wherein the protective agent is administered subsequently to said radiation exposure.

10. (previously presented) A method as set forth in claim 1, wherein the effective amount of the protective agent is administered to said patient in a time period of from 6 hours before to 6 hours after the exposure to radiation.

11. (previously presented) A method as set forth in claim 1, wherein the effective amount of the protective agent is administered to said patient in a time period of from 1 hour before to 1 hour after the exposure to radiation.

12. (previously presented) A method as set forth in claim 1, wherein the effective amount of the protective agent is administered to said patient in a time period of from one-half hour before to one-half hour after the exposure to radiation.

13. (previously presented) A method as set forth in claim 1, wherein effective amount of the protective agent is administered to said patient orally, parenterally or topically, and the administration of said effective amount of protective agent results in a blood serum level equivalent to that achieved by parenteral administration in the range of from 1.0 mg/kg body weight to 600 mg/kg body weight.

14. (previously presented) A method as set forth in claim 13, wherein the administration of said effective amount of the protective agent results in a blood serum level equivalent to that achieved by parenteral administration in the range of from 5 mg/kg body weight to 500 mg/kg body weight.

15. (previously presented) A method as set forth in claim 13, wherein the administration of said effective amount of the protective agent results in a blood serum level equivalent to that

achieved by parenteral administration in the range of from 10 mg/kg body weight to 400 mg/kg body weight.

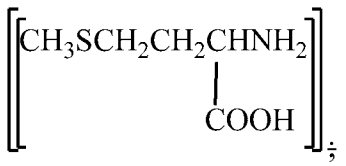
16. (original) A method as set forth in claim 1, further comprising administering to said patient a supplemental amount of the protective agent after the administration of said effective amount.

17. (original) A method as set forth in claim 16, wherein said supplemental amount of the protective agent is administered orally, parenterally, or topically to said patient.

18. (previously presented) A method as set forth in claim 17, wherein the administration of said supplemental amount of the protective agent is sufficient to maintain a blood serum level of protective agent within said patient of at least 10% of the blood serum level achieved by administration of the effective amount of the protective agent.

19. (previously presented) A method as set forth in claim 18, wherein the administration of said supplemental amount of the protective agent is sufficient to maintain a blood serum level of protective agent within said patient of from 20% to 70% of the blood serum level achieved by administration of the effective amount of the protective agent.

20. (currently amended) A method for reducing oral mucositis in a human or animal patient <u>in need thereof</u> undergoing treatment with a chemotherapeutic effective amount of an anti-tumor platinum-coordination compound, the method comprising administering to said patient an effective amount of a protective agent <u>selected from the group consisting of D-methionine, L-methionine, a mixture of D-methionine and L-methionine, and</u> ~~comprising methionine having the structure~~



~~or~~ a pharmaceutically acceptable salt thereof.

21. (cancelled)

22. (cancelled)

23. (original) A method as set forth in claim 20, wherein the protective agent is administered prior to the administration of said chemotherapeutic effective amount of anti-tumor platinum-coordination compound.

24. (original) A method as set forth in claim 20, wherein the protective agent is administered simultaneously with the administration of said chemotherapeutic effective amount of anti-tumor platinum-coordination compound.

25. (original) A method as set forth in claim 20, wherein the protective agent is administered subsequently to the administration of said chemotherapeutic effective amount of anti-tumor platinum-coordination compound.

26. (previously presented) A method as set forth in claim 20, wherein the protective agent is administered orally, parenterally or topically to said patient, and the administration of said effective amount of the protective agent results in a blood serum level equivalent to that achieved by parenteral administration in the range of from 1.0 mg/kg body weight to 600 mg/kg body weight.

27. (previously presented) A method as set forth in claim 26, wherein the administration of said effective amount of the protective agent results in a blood serum level equivalent to that achieved by parenteral administration in the range of from 5 mg/kg body weight to 500 mg/kg body weight.

28. (previously presented) A method as set forth in claim 26, wherein the administration of said effective amount of the protective agent results in a blood serum level equivalent to that achieved by parenteral administration in the range of from 10 mg/kg body weight to 400 mg/kg body weight.

29. (original) A method as set forth in claim 20, further comprising administering to said patient a supplemental amount of the protective agent after the administration of said effective amount.

30. (original) A method as set forth in claim 29, wherein said supplemental amount of the protective agent is administered orally, parenterally, or topically to said patient.

31. (previously presented) A method as set forth in claim 30, wherein the administration of said supplemental amount of the protective agent is sufficient to maintain a blood serum level of protective agent within said patient of at least 10% of the blood serum level achieved by administration of the effective amount of the protective agent.

32. (previously presented) A method as set forth in claim 30, wherein the administration of said supplemental amount of the protective agent is sufficient to maintain a blood serum level of protective agent within said patient of from 20% to 70% of the blood serum level achieved by administration of the effective amount of the protective agent.

33.-37. (cancelled)

38. (previously presented) The method as set forth in claim 1 wherein the patient is undergoing treatment with a chemotherapeutic effective amount of an anti-tumor platinum-coordination compound.

39. (previously presented) The method as set forth in claim 38 wherein the anti-tumor platinum-coordination compound is cisplatin.

40. (previously presented) The method as set forth in claim 39 wherein the protective agent is D-methionine.